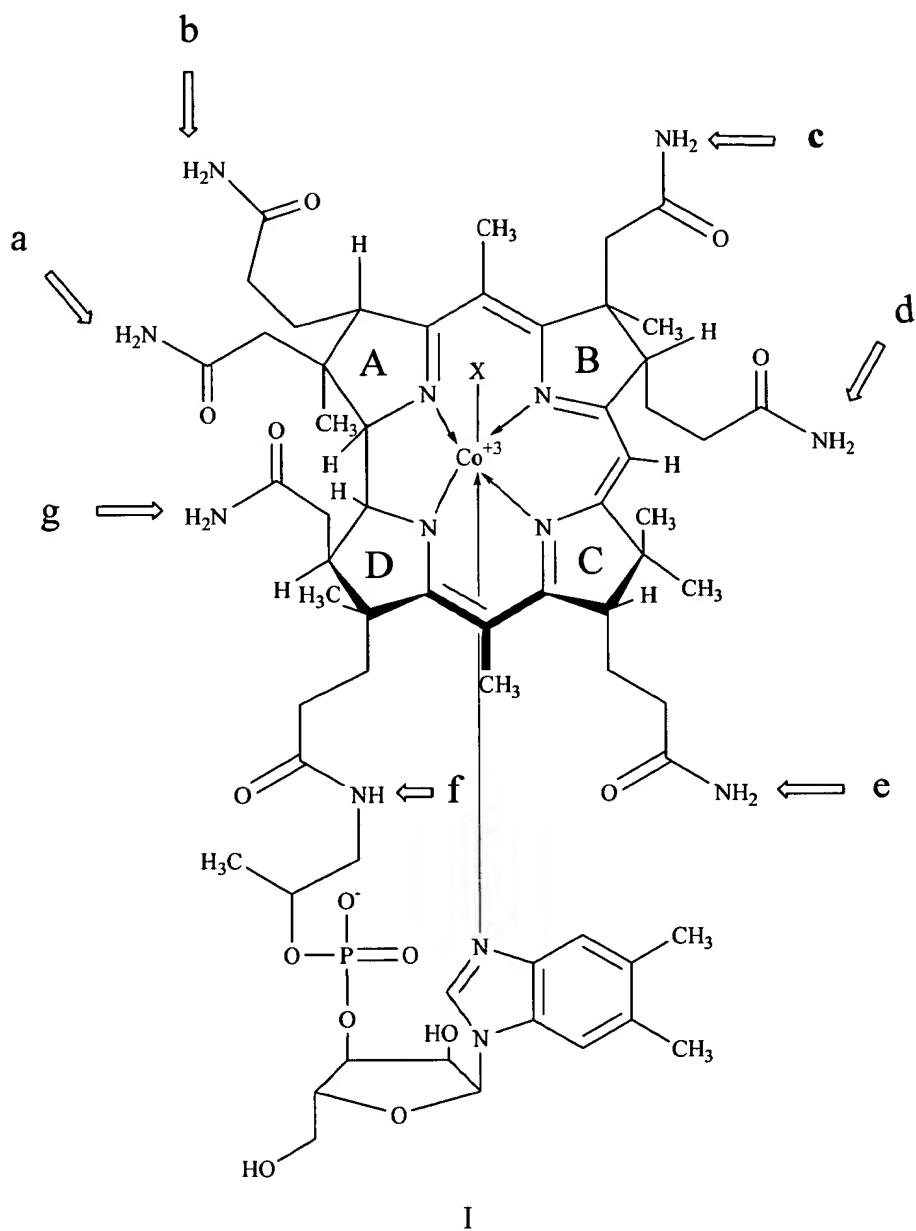


**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

Claim 1 (previously presented): A compound of formula I



linked to a molecule comprising B-10, wherein X is CN, OH, CH<sub>3</sub>, adenosyl or a molecule comprising B-10 and optionally linked to a linker comprising a detectable radionuclide or a therapeutic radionuclide; or a pharmaceutically acceptable salt thereof.

Claim 2 (previously presented): The compound of claim 1, wherein the molecule comprising B-10 is directly linked to the 6-position of the compound of formula I or is directly linked to the b, d or e-carboxamide group of the compound of formula I.

Claim 3 (previously presented): The compound of claim 1, wherein the molecule comprising B-10 is linked by a linker to the 6-position of the compound of formula I or is linked by a linker to the b, d or e-carboxamide group of the compound of formula I.

Claim 4 (previously presented): The compound of claim 1, wherein the molecule comprising B-10 is linked to the b-carboxamide group of the compound of formula I.

Claim 5 (currently amended): The compound of claim 1, wherein the ~~molecule~~ molecule comprising B-10 is linked to the d-carboxamide group of the compound of formula I.

Claim 6 (previously presented): The compound of claim 1, wherein the molecule comprising B-10 is linked to the e-carboxamide group of the compound of formula I.

Claim 7 (previously presented): The compound of claim 1, wherein the molecule comprising B-10 is linked to the b-carboxamide group and a second molecule comprising B-10 is linked to the d-carboxamide group of the compound of formula I.

Claim 8 (previously presented): The compound of claim 1, wherein molecule comprising B-10 is linked to the 6-position of the compound of formula I.

Claim 9 (previously presented): The compound of claim 1, wherein the molecule comprising B-10 contains 1 to about 20 boron atoms, inclusive.

Claim 10 (previously presented): The compound of claim 1, wherein the molecule comprising B-10 is an amino acid, a carbohydrate, a nucleoside or a carborane.

Claim 11 (previously presented): The compound of claim 1, wherein the molecule comprising B-10 is o-carborane, m-carborane or p-carborane.

Claim 12 (previously presented): The compound of claim 1, wherein the molecule comprising B-10 is o-carborane.

Claim 13 (previously presented): The compound of claim 3, wherein at least one linker is of the formula W-A-Q wherein A is (C<sub>1</sub>-C<sub>6</sub>)alkyl, (C<sub>2</sub>-C<sub>6</sub>)alkenyl, (C<sub>2</sub>-C<sub>6</sub>)alkynyl, (C<sub>3</sub>-C<sub>8</sub>)cycloalkyl, or (C<sub>6</sub>-C<sub>10</sub>)aryl, wherein W and Q are each independently -N(R)C(=O)-, -C(=O)N(R)-, -OC(=O)-, -C(=O)O-, -O-, -S-, -S(O)-, -S(O)<sub>2</sub>-, -N(R)-, -C(=O)-, or a direct bond; wherein each R is independently H or (C<sub>1</sub>-C<sub>6</sub>)alkyl.

Claim 14 (previously presented): The compound of claim 13, wherein W is NH<sub>2</sub> or COOH and Q is NH<sub>2</sub> or COOH.

Claim 15 (previously presented): The compound of claim 13, wherein A is (C<sub>1</sub>-C<sub>6</sub>)alkyl.

Claim 16 (previously presented): The compound of claim 3, wherein at least one linker is about 5 angstroms to about 50 angstroms, inclusive.

Claim 17 (previously presented): The compound of claim 3, wherein at least one linker comprises a therapeutic radionuclide or a diagnostic radionuclide.

Claim 18 (previously presented): The compound of claim 17, wherein the therapeutic radionuclide is a metallic radionuclide.

Claim 19 (previously presented): The compound of claim 17, wherein the diagnostic radionuclide is a metallic radionuclide.

Claim 20 (previously presented): The compound of claim 17, wherein the diagnostic radionuclide is a non-metallic radionuclide.

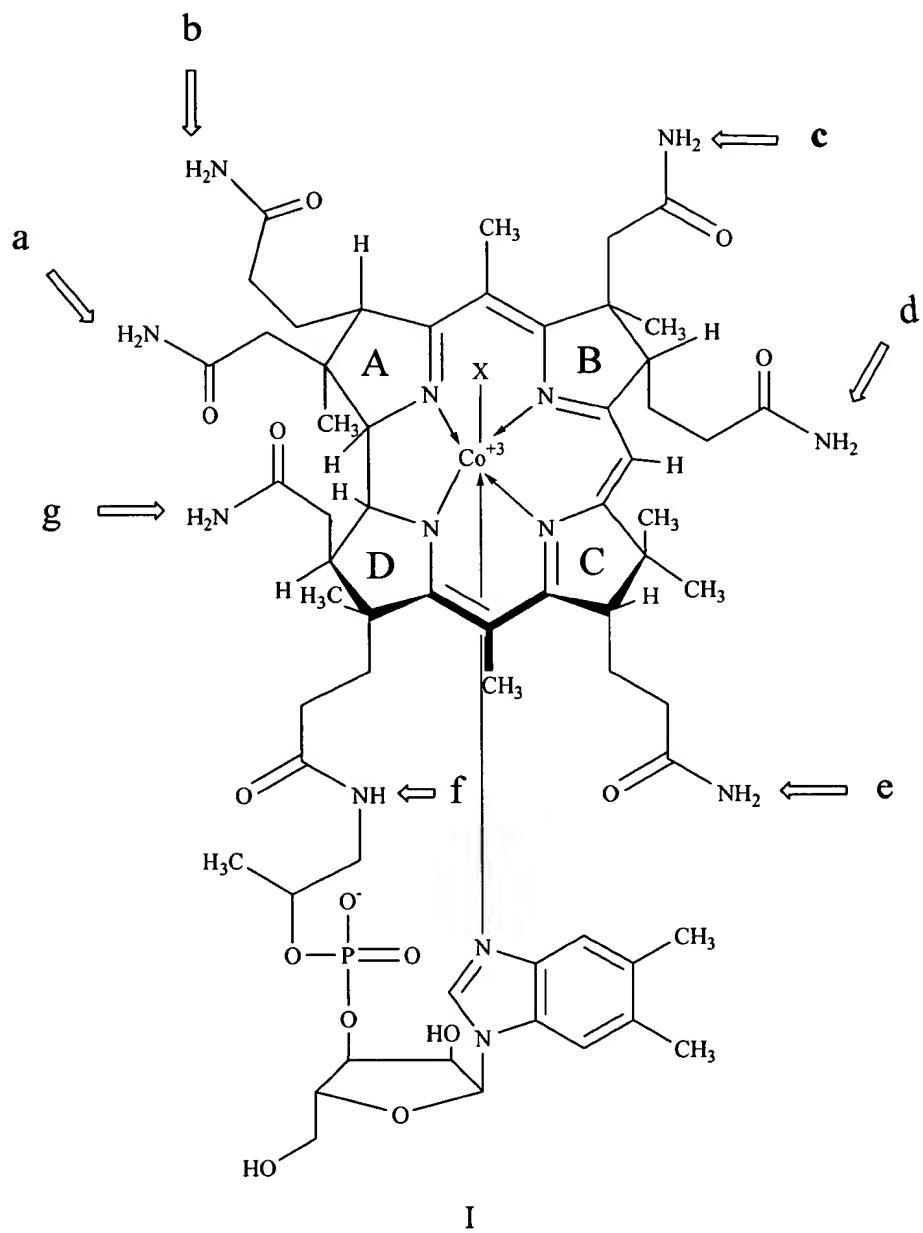
Claim 21 (previously presented): The compound of claim 3, wherein at least one linker is a divalent radical formed from a peptide.

Claim 22 (previously presented): The compound of claim 3, wherein at least one linker is a divalent radical formed from an amino acid.

Claim 23 (previously presented): The compound of claim 3, wherein at least one linker is poly-L-glutamic acid, poly-L-aspartic acid, poly-L-histidine, poly-L-ornithine, poly-L-serine, poly-L-threonine, poly-L-tyrosine, poly-L-leucine, poly-L-lysine-L-phenylalanine, poly-L-lysine or poly-L-lysine-L-tyrosine.

Claim 24 (previously presented): The compound of claim 1, wherein the compound of formula I is also linked to a linker comprising a detectable radionuclide or a therapeutic radionuclide.

Claim 25 (previously presented): A compound of formula I



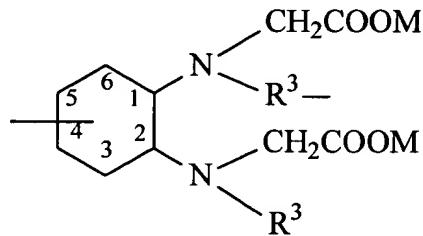
linked to one or more groups of the formula Q-L-W-Det, wherein X is CN, OH, CH<sub>3</sub>, adenosyl, a molecule comprising B-10 or Q-L-W-Det; wherein Det is a chelating group comprising Gd-157; L is a linker or absent; and W and Q are each independently -N(R)C(=O)-, -C(=O)N(R)-, -OC(=O)-, -C(=O)O-, -O-, -S-, -S(O)-, -S(O)<sub>2</sub>-, -N(R)-, -C(=O)-, or a direct bond; wherein each R is independently H or (C<sub>1</sub>-C<sub>6</sub>)alkyl; or a pharmaceutically acceptable salt thereof.

Claim 26 (previously presented): The compound of claim 25, wherein the group of the formula Q-L-W-Det is linked to the b-carboxamide group, d-carboxamide group, e-carboxamide group or the 6-position of the compound of formula I.

Claim 27 (previously presented): The compound of claim 25, wherein the group of the formula Q-L-W-Det is linked to the b-carboxamide group and a second group of the formula Q-L-W-Det is linked to the d-carboxamide group of the compound of formula I.

Claim 28 (previously presented): The compound of claim 25, wherein the group of the formula Q-L-W-Det is between about 20 and about 500 angstroms, inclusive, in length.

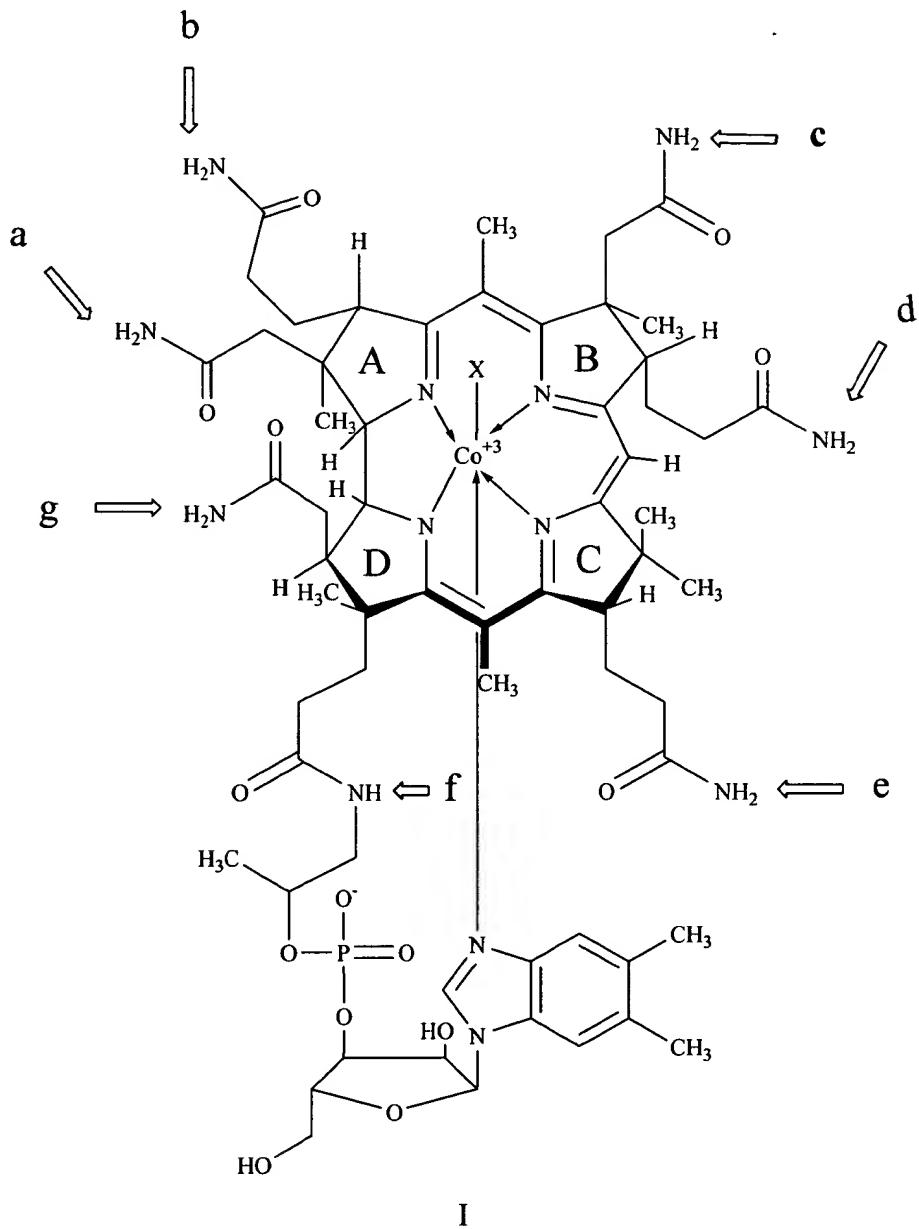
Claim 29 (currently amended): The compound of claim 25, wherein at least one chelating group is ethylenediaminetetraacetic acid (EDTA); diethylenetriaminepentaacetic acid (DTPA); 1,4,7,10-tetraazacyclododecane-N,N',N",N'''-tetraacetic acid (DOTA); 1,4,8,11-tetraazacyclotetradecane-N,N',N",N'''-tetraacetic acid (TETA); 1,4,8,12-tetraazacyclopentadecane-N,N',N",N'''-tetraacetic acid (15N4); 1,4,7-triazacyclononane-N,N',N"-triacetic acid (9N3); 1,5,9-triazacyclododecane-N,N',N"-triacetic acid (12N3); N-[N-[N-[(benzoylthio) acetyl]glycyl]glycyl]glycine (MAG3); or a cyclohexane-based metal chelator (DCTA) of the formula



wherein R<sup>3</sup> ~~may be~~ is (C<sub>1</sub>-C<sub>4</sub>)alkyl- or CH<sub>2</sub>CO<sub>2</sub>- , and M is a metal or nonmetal cation.

Claim 30 (previously presented): The compound of claim 25, wherein at least one chelating group is diethylenetriaminepentaacetic acid (DTPA) comprising Gd-157.

Claim 31 (previously presented): A compound of formula I



linked to a molecule comprising B-10; wherein the compound of formula I is linked to a group of the formula Q-L-W-Det, wherein X is CN, OH, CH<sub>3</sub>, adenosyl, a molecule comprising B-10 or Q-L-W-Det; wherein

- a) Det is a chelating group comprising a therapeutic radionuclide or a diagnostic radionuclide;

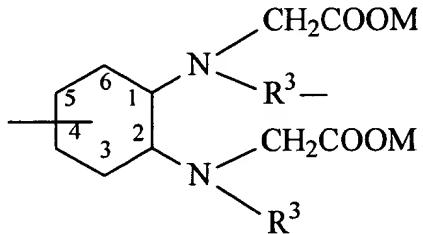
- b) L is a linker or absent; and
- c) Q and W are each independently  $-\text{N}(\text{R})\text{C}(=\text{O})-$ ,  $-\text{C}(=\text{O})\text{N}(\text{R})-$ ,  $-\text{OC}(=\text{O})-$ ,  $-\text{C}(=\text{O})\text{O}-$ ,  $-\text{O}-$ ,  $-\text{S}-$ ,  $-\text{S}(\text{O})-$ ,  $-\text{S}(\text{O})_2-$ ,  $-\text{C}(=\text{O})-$ ,  $-\text{N}(\text{R})-$ , or a direct bond; wherein each R is independently H or  $(\text{C}_1\text{-}\text{C}_6)\text{alkyl}$ ;

or a pharmaceutically acceptable salt thereof.

Claim 32 (previously presented): The compound of claim 31, wherein at least one of the radionuclides is  $\text{Tc}^{99\text{m}}$ ,  $\text{In}^{111}$ ,  $\text{In}^{110}$ ,  $\text{Gd}^{157}$  or  $\text{Y}^{86}$ .

Claim 33 (previously presented): The compound of claim 31, wherein a molecule comprising B-10 is linked to a  $\beta$ -carboxamide group,  $\delta$ -carboxamide group,  $\epsilon$ -carboxamide group or the 6-position of the compound of formula I.

Claim 34 (currently amended): The compound of claim 31, wherein at least one chelating group is ethylenediaminetetraacetic acid (EDTA); diethylenetriaminepentaacetic acid (DTPA); 1,4,7,10-tetraazacyclododecane- $\text{N},\text{N}',\text{N}'',\text{N}'''$ -tetraacetic acid (DOTA); 1,4,8,11-tetraazacyclotetradecane- $\text{N},\text{N}',\text{N}'',\text{N}'''$ -tetraacetic acid (TETA); 1,4,8,12-tetraazacyclopentadecane- $\text{N},\text{N}',\text{N}'',\text{N}'''$ -tetraacetic acid (15N4); 1,4,7-triazacyclononane- $\text{N},\text{N}',\text{N}''$ -triacetic acid (9N3); 1,5,9-triazacyclododecane- $\text{N},\text{N}',\text{N}''$ -triacetic acid (12N3);  $\text{N}-[\text{N}-[\text{N}-[(\text{benzoylthio})\text{acetyl}]\text{glycyl}]\text{glycyl}]\text{glycine}$  (MAG3); or a cyclohexane-based metal chelator (DCTA) of the formula



wherein  $\text{R}^3$  ~~may be~~ is  $(\text{C}_1\text{-}\text{C}_4)\text{alkyl}$  or  $\text{CH}_2\text{CO}_2-$ , and M is a metal or nonmetal cation.

Claim 35 (previously presented): The compound of claim 31, wherein at least one chelating group is diethylenetriaminepentaacetic acid (DTPA) comprising Gd-157.

Claim 36 (currently amended): The compound of claim 31, wherein the molecule comprising B-10 contains about 1 to about 20 boron atoms, inclusive.

Claim 37 (previously presented): The compound of claim 31, wherein the molecule comprising B-10 is an amino acid, a carbohydrate, a nucleoside or a carborane.

Claim 38 (previously presented): The compound of claim 31, wherein the molecule comprising B-10 is o-nido-carborane, m-nido-carborane or p-nido-carborane.

Claim 39 (previously presented): The compound of claim 31, wherein the molecule comprising B-10 is o-carborane.

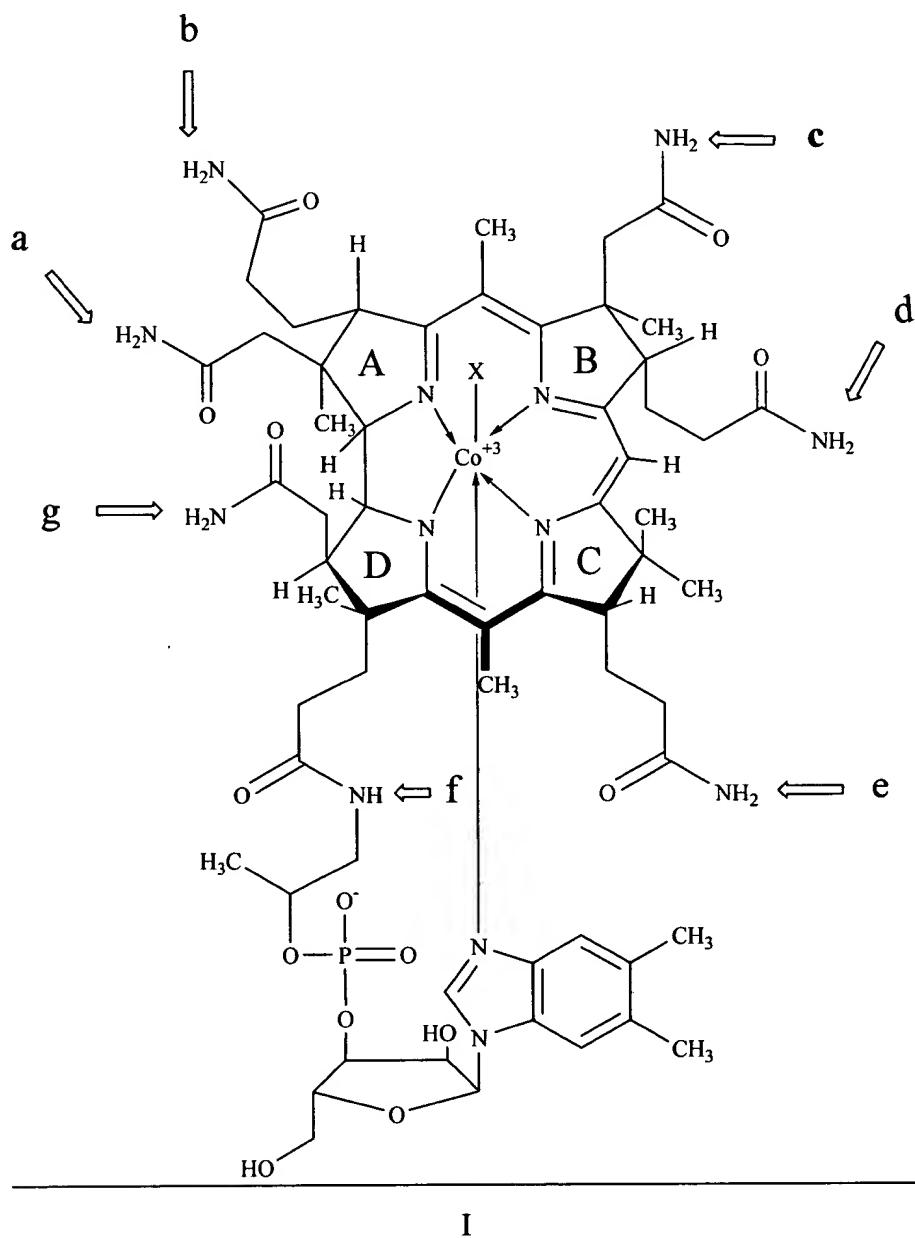
Claim 40 (previously presented): The compound of claim 31, wherein the molecule comprising B-10 is directly linked to the 6-position or to the b, d or e-carboxamide group of the compound of formula I.

Claim 41 (previously presented): The compound of claim 31, wherein the compound of formula I is linked to the molecule comprising B-10 through a linker.

Claim 42 (previously presented): The compound of claim 41, wherein the linker comprises a non-metallic radionuclide.

Claim 43 (previously presented): The compound of claim 41, wherein the linker is about 5 angstroms to about 50 angstroms, inclusive.

Claim 44 (currently amended): ~~The A compound of claim 1, further comprising a formula I~~



I

linked to a molecule comprising B-10, wherein X is CN, OH, CH<sub>3</sub>, adenosyl or a molecule comprising B-10 comprising at least one detectable radionuclide or a therapeutic radionuclide; or a pharmaceutically acceptable salt thereof.

Claim 45 (previously presented): The compound of claim 44, wherein the detectable radionuclide is a non-metallic radionuclide.

Claim 46 (previously presented): The compound of claim 45, wherein the non-metallic radionuclide is Carbon-11, Fluorine-18, Bromine-76, Iodine-123 or Iodine-124.

Claim 47 (previously presented): The compound of claim 44, wherein the detectable radionuclide is directly linked to the compound of formula I.

Claim 48 (previously presented): The compound of claim 44, wherein the detectable radionuclide is linked by a linker to the compound of formula I.

Claim 49 (previously presented): The compound of claim 48, wherein the linker is of the formula W-A wherein A is (C<sub>1</sub>-C<sub>6</sub>)alkyl, (C<sub>2</sub>-C<sub>6</sub>)alkenyl, (C<sub>2</sub>-C<sub>6</sub>)alkynyl, (C<sub>3</sub>-C<sub>8</sub>)cycloalkyl, or (C<sub>6</sub>-C<sub>10</sub>)aryl, wherein W is -N(R)C(=O)-, -C(=O)N(R)-, -OC(=O)-, -C(=O)O-, -O-, -S-, -S(O)-, -S(O)<sub>2</sub>-, -N(R)-, -C(=O)-, or a direct bond; wherein each R is independently H or (C<sub>1</sub>-C<sub>6</sub>)alkyl, and wherein A is substituted with one or more non-metallic radionuclides.

Claim 50 (previously presented): The compound of claim 48, wherein the linker is about 5 angstroms to about 50 angstroms, inclusive.

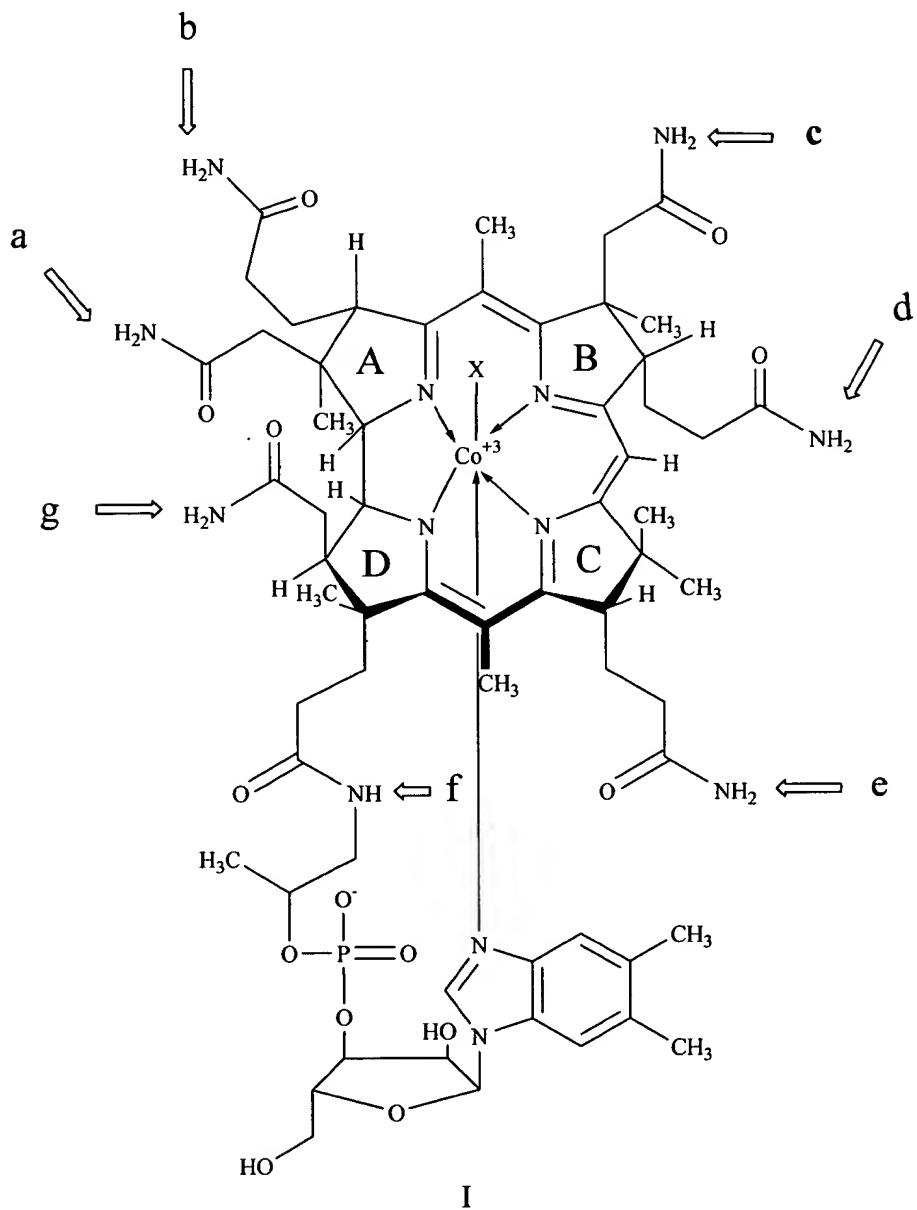
Claim 51 (previously presented): The compound of claim 48, wherein the linker is a divalent peptide or amino acid.

Claim 52 (previously presented): The compound of claim 48, wherein the linker is poly-L-glutamic acid, poly-L-aspartic acid, poly-L-histidine, poly-L-ornithine, poly-L-serine, poly-L-threonine, poly-L-tyrosine, poly-L-leucine, poly-L-lysine-L-phenylalanine, poly-L-lysine or poly-L-lysine-L-tyrosine.

Claim 53 (previously presented): The compound of claim 48, wherein the linker is linked to the 6-position of the compound of formula I or is linked to the a b-, d- or e-carboxamide group of the compound of formula I.

Claims 54-64 (canceled)

Claims 65 (previously presented): A compound of formula I



linked

- 1) to a molecule comprising B-10 or a chelating group comprising Gd-157; and
- 2) to at least one molecule of the formula Q-L-W-Det, wherein X is CN, OH, CH<sub>3</sub>, adenosyl, a molecule comprising B-10 or Q-L-W-Det; wherein each Det is independently a chelating group comprising a metallic radionuclide; each L is independently a linker or absent; and each W and Q are each independently -N(R)C(=O)-, -C(=O)N(R)-, -OC(=O)-, -C(=O)O-, -O-, -S-, -S(O)-, -S(O)<sub>2</sub>-,

-C(=O)-, -N(R)-, or a direct bond; wherein each R is independently H or (C<sub>1</sub>-C<sub>6</sub>)alkyl;  
or a pharmaceutically acceptable salt thereof.

Claim 66 (previously presented): The compound of claim 1 or 44, wherein the compound of formula I is also linked to a group comprising Gd-157.

Claim 67 (previously presented): The compound of claim 66, wherein the group comprising Gd-157 has the formula Q-L-W-Det, wherein X is CN, OH, CH<sub>3</sub>, adenosyl, a molecule comprising B-10 or Q-L-W-Det; wherein Det is a chelating group comprising Gd-157; L is a linker or absent; and W and Q are each independently -N(R)C(=O)-, -C(=O)N(R)-, -OC(=O)-, -C(=O)O-, -O-, -S-, -S(O)-, -S(O)<sub>2</sub>-, -N(R)-, -C(=O)-, or a direct bond; wherein each R is independently H or (C<sub>1</sub>-C<sub>6</sub>)alkyl.

Claim 68 (previously presented): A composition comprising a compound of any one of claim 1-53 or 65-67 and a pharmaceutically acceptable carrier.

Claim 69-74 (canceled):